

Massachusetts Department of Environmental Protection Bureau of Waste Prevention

2003 Toxics Use Reporting Instructions

Developed in Collaboration with

Office of Technical Assistance for Toxics Use Reduction

Toxics Use Reduction Institute

Executive Office of Environmental Affairs



COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS DEPARTMENT OF ENVIRONMENTAL PROTECTION

ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

MITT ROMNEY Governor

KERRY HEALEY Lieutenant Governor ELLEN ROY HERZFELDER Secretary

ROBERT W. GOLLEDGE, JR. Commissioner

March 25, 2004

Dear Facility Owner or Operator:

Enclosed please find the 2003 Toxics Use Reporting Forms and Instructions. Based on the requirements of MGL c. 21I, the Toxics Use Reduction Act (TURA), your facility may be required to file a Toxics Use Report with the Department of Environmental Protection (DEP) by July 1, 2004. Please also note that 2004 is a TURA planning year, meaning that facilities must complete Plan Updates and submit Plan Summaries to DEP by July 1, 2004.

DEP is pleased to announce that, for the first time, your entire Toxics Use Reports and your Planning documents may now be submitted to DEP online. We encourage facilities to take advantage of online filing, which can save postage and paper, ease form preparation, and reduce reporting errors. Please see page i of this document for further information. The enclosed forms must be completed using calendar year 2003 information and filed online or mailed to DEP by July 1, 2004. You should be aware that failure to comply with annual TURA reporting, or failure to submit accurate, complete and signed forms may result in increased TURA fees and possible enforcement action, including civil penalties.

If filing paper copies, Toxics Use Reports, including all completed forms, should be sent to: DEP, TURA, 8th Floor, One Winter Street, Boston, MA 02108-4747. Please do not send any fee payments with your Toxics Use Report. DEP will send you a bill for the TURA fee, which must be paid within 30 days of receipt.

The Toxics Use Reporting Forms and Instructions, TURA Plan Update Guidance, and additional information about TURA are available on DEP's web site at www.mass.gov/dep/bwp/dhm/tura. Guidance on U.S. Environmental Protection Agency (EPA) Toxics Release Inventory (TRI) reporting, including the Form R, can be found on EPA's web site at www.epa.gov/tri.

Your Toxics Use Report provides DEP and the public with valuable information about toxics use in the Commonwealth. Previous year's information can be found at www.turi.org/turadata/index.html. We appreciate your time and attention to this matter. If you have any questions, please contact DEP at 617-292-5982 or the Office of Technical Assistance at 617-626-1060.

Sincerely,

Barbara Kwetz, Director Division of Planning and Evaluation Bureau of Waste Prevention

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WHAT'S NEW FOR CALENDAR YEAR 2003 REPORTS

DEP is Offering 100% Electronic Reporting

For the first time, all TURA reporting and planning forms may be submitted to DEP through electronic filing. For 2003 reporting, DEP has added electronic reporting for state-only Form Rs, which have previously needed to be submitted in paper form. Forms may continue to be submitted in paper form, though DEP encourages facilities to file electronically to improve reporting and reduce costs.

2004 TURA Plan Updates

2004 also is a TURA planning year, meaning that applicable facilities must complete Plan Updates and submit Plan Summaries and Certification Statements to DEP by July 1, 2004. This year, these forms may be completed and submitted electronically for the first time. Guidance and forms for completing Plan Updates can be found on the DEP web site at

http://www.state.ma.us/dep/bwp/dhm/tura/policies.htm#pols.

NEW! EASY ONLINE TURA REPORTING

Submitting Toxics Use Reports as required by the Toxics Use Reduction Act (TURA) is now a lot easier. As part of the Massachusetts eGovernment initiative, DEP is now accepting Toxics Use Reports and Plan Summaries online.

ADVANTAGES

- ✓ Save postage and transportation by filing online rather than through the mail or over the counter.
- ✓ Complete forms more quickly and easily, as many data fields will fill themselves in or pre-populate based on prior years' submittals.
- ✓ The system will complete the Fee Worksheet automatically.
- ✓ Avoid improperly completed forms through data entry controls.

WHICH FORMS CAN BE SUBMITTED VIA eDEP?

Form	eDEP-Electronic Filing	Paper	Disk
Toxics Use Report (including billing information, cover sheet, Form S, and fee form)	Yes	Yes	No
Form R – Required for TRI facilities	Yes	Yes	Yes
Form R/A – State-only (for state-only chemicals and SIC codes)	Yes (NEW!)	Yes	No
Plan Summaries (including Certification Statements and Plan Exception Forms)	Yes (NEW!)	Yes	No

EASY TO SET UP

- ✓ Register online with eDEP https://edep.dep.mass.gov/DEPHome.aspx to set up an account. It takes about 15 minutes to sign up online and receive confirmation by email. Contact DEP-TURA at 617-556-1011 if you need to obtain identification information for your facility. This information, which is required to register for TURA electronic filing, includes your DEP Facility ID#, TAX ID# (FEIN/TIN), and TURA ID #. Planners also need to register online if they wish to certify plan summaries electronically. For proof of identity, planners need to submit a signature form including their TUR Planner ID#. Contact Paul Walsh at DEP at 617-556-1011 if you are a planner and need to know your ID#.
- ✓ **Fill out** the agreement online, print, sign, and mail it back to DEP to activate the account. Your eDEP Administrator can then log in at https://edep.dep.mass.gov/DEPHome.aspx and set up users to access eDEP.
- ✓ Within 48 hours of receipt at DEP, you can then **log in** at eDEP (http://edep.dep.mass.gov) and begin completing TURA forms. (Forms are saved online as you enter the information so that you do not have to complete the entire entry in one sitting.)

REQUIREMENTS

- ✓ You need a registered Massachusetts eBusiness Central account, a computer and connection to the Internet.
- ✓ You must use Microsoft Internet Explorer® 5.0 or higher or Netscape Navigator® 7.0, <u>Adobe Acrobat Reader Versions 5.0 through 5.01 or 6.0.1</u> please note that Adobe Acrobat Reader 6.0 will not work with eDEP.to access eDEP functions. All may be downloaded for free.

NEED ADDITIONAL INFORMATION?

- ✓ Contact Walter Hope at DEP (617-292-5982 Tuesday Friday) or Walter. Hope@state.ma.us
- ✓ To learn more about filing notifications online call Mass.Gov Customer Support (866-888-2808).
- ✓ For assistance in registering at Massachusetts eBusiness Central call (866-888-28080).

TURA 2003 Reporting Checklist

Please check the boxes before mailing your 2003 Toxics Use Report to ensure that the report is complete. Please include this check list in your 2003 Toxics Use Report.

A	Has the Form S Cover Sheet been SIGNED and DATED ?
В	Has the Form R (or the Form A) or State Only Form R/A been signed and dated FOR EACH CHEMICAL ?
С	If you are filing a Form A, have you ENTERED A PRODUCTION RATIO for the chemical in line 1.1? (Refer to page 14 for information regarding addition of the production ratio.)
D	Have you included a Form S FOR EACH CHEMICAL?
Е	Has the Fee Worksheet been completed AND SIGNED ?
F	Has the TURA Billing Information Form been completed?

When finished, please include this Checklist with your 2003 Toxics Use Report.

Note: 2004 is a TURA Planning year and TURA Plan Summaries, including Certification Statements are due to DEP by July 1, 2004, along with 2003 reporting forms.

Forms Key

TURA Billing Information Key

Note: If you are filling out the forms on paper, please fill in the reporting year, facility name, and DEP facility ID number in the top right corner of each page. If you are filling out the forms on the web, these items should be prepopulated. Filling out this information ensures that your submittal stays together.

- a. Facility Name. Please print or type your facility name here.
- b. Facility Legal Name. Please print or type your facility legal name here.
- c. Facility Site Name. Please print or type your facility site name here.
- d. Facility d/b/a (doing business as) Name. Please print or type the name your facility is doing business under, if not the name in line a.
- e. Facility is a Subsidiary of or Owned by. Please print or type the name of the company that owns your facility, if applicable.
- f. First Name of Chief Financial Officer/Accountant. Please print or type his/her first name.
- g. Last Name of Chief Financial Officer/Accountant. Please print or type his/her last name.
- h. Please check if this is to whom the invoice should be sent. Check this box if the invoice should be sent to the chief financial officer/accountant.
- i. Phone. Please print or type Chief Financial Officer/Accountant's telephone number.
- j. Ext. Please print or type Chief Financial Officer/Accountant's extension, if applicable.
- k. Fax. Please print or type Chief Financial Officer/Accountant's fax number.
- 1. First Name of Person Responsible for Accounts Payable. Please print or type his/her first name.
- m. Last Name of Person Responsible for Accounts Payable. Please print or type his/her last name.
- n. Please check if this is to whom the invoice should be sent. Check this box if the invoice should be sent to the person responsible for accounts payable.
- o. Phone. Please print or type Person Responsible for Accounts Payable's telephone number.
- p. Ext. Please print or type Person Responsible for Accounts Payable's extension, if applicable.
- q. Fax. Please print or type Person Responsible for Accounts Payable's fax number.
- r. Facility Site Address Street Address. Please print or type the street address of your facility.
- s. Facility Site Address Street Address. Extra line.
- t. Facility Site Address -- City. Please print or type the town or city where your facility is located.
- u. Facility Site Address State. Pre populated. Facility must be located in Massachusetts.
- v. Facility Site Address Zip. Please print or type the zip code for where your facility is located.
- w. Facility Billing Address Street Address. Please print or type the billing address of your facility.
- x. Facility Billing Address Street Address. Extra line.
- y. Facility Billing Address City. Please print or type the town or city where your facility's billing address is.
- z. Facility Billing Address State. Please print or type the town or city where your facility's billing address is.
- aa. Facility Billing Address Zip. Please print or type the zip code for your facility's billing address.
- bb. Taxpayer Identification Number. Please print or type your facility's Federal Employee Identification Number or FEIN.
- cc. Toxics Release Inventory Number. Please print or type your facility's Federal TRI number.

TURA Form S Cover Sheet Key

Note: If you are filling out the forms on paper, please fill in the reporting year, facility name, and DEP facility ID number in the top right corner of each page. If you are filling out the forms on the web, these items should be prepopulated. Filling out this information ensures that your submittal stays together.

Note: Dioxin and dioxin-like compounds should be reported in grams. Decimal points may be used in reporting dioxin and dioxin-like compounds.

Section 1: General Information

- a. Facility Name and Address Name. Please type or print your facility name here.
- b. Facility Name and Address Street Address. Please print or type the street address of your facility.
- c. Facility Name and Address City. Please print or type the town or city where your facility is located.
- d. Facility Name and Address State. Pre populated. Facility must be located in Massachusetts
- e. Facility Name and Address Zip. Please print or type the zip code for where your facility is located.
- f. Are you making a trade secret claim? Please check either yes or no.
- g. Sanitized or Unsanitized. Please check if this TURA submittal is either sanitized or unsanitized.
- h. Are all chemicals used to treat wastewater? Please check yes or no. If yes, no production unit numbers are needed.

Note: If you are filling out these forms on the web, all certification statements, regardless of where they are located in the forms, must be signed at the very end of the submittal.

Section 2: Certification Statement

- a. Authorized Signature. Signature of authorized personnel at the facility.
- b. Date. Date of signature.
- c. First Name. Please print or type the first name of the person who signed on line a.
- d. Last Name. Please print or type the last name of the person who signed on line a.
- e. Position/Title. Please print or type the position/title of the person who signed on line a.
- f. Email address. Please print or type the email address of the person who signed on line a.

Note: Please see Appendix B for CAS #s and chemical names.

Section 3: Chemicals Previously Reported that Are Not Reportable This Year

- a.1. CAS # of chemical not reportable. Please print or type the CAS # of the chemical that you reported last year, but are not reporting this year.
- a.2. Chemical Name. Please print or type the name of the chemical that you reported last year, but are not reporting this year.
- a.3. Explanation of why the chemical is not reportable. Please check up to four codes, indicating why this chemical is no longer reportable. Code descriptions are located at the top of the page.
- a.4. CAS # of Chemical Substituted. If another chemical was substituted for the chemical on line a.1, please print or type the CAS # here.
- a.5. Chemical Name. If another chemical was substituted for the chemical on line a.1, please print or type the chemical name here.

If you have additional chemicals that need to be listed in this section, please continue to fill out this section.

f. Do you have more chemicals not subject to reporting this year? Please check yes or no. If yes, and you are filling out the form on the web, an additional sheet will appear. If you are filling out the form on paper, please attach a second sheet for those additional chemicals.

Section 4: Facility-Wide Listing of Production Units

Note: If the chemicals are only used to treat wastewater, you do not need to fill out this section.

- Production Unit Number. Please assign this production unit a number. Please use consistent numbers from year to year, and do no reuse numbers after a production unit has been discontinued. Is this production unit in use for the reporting year of this submittal? Please check yes or no.
- Describe the process. Please describe the function of the production unit.
- Describe the product. Please describe the end product of the production unit.
- SIC code. Please enter the SIC code that best describes the production unit. Check Appendix A for SIC
- SIC code. Please enter the SIC code that best describes the production unit. Check Appendix A for SIC codes.
- SIC code. Please enter the SIC code that best describes the production unit. Check Appendix A for SIC
- SIC code. Please enter the SIC code that best describes the production unit. Check Appendix A for SIC
- Check the appropriate unit of product. Please check one. h.
- Production Process Step Information for This Production Unit. Please enter as many process codes as necessary for this production unit. Please see Appendix H for guidance.
- Please enter the production unit number.
- CAS # and name of chemical. Please print or type the CAS # of the first chemical associated with this production unit. Then check the process codes associated with that chemical. Check all if the chemical is associated with all process codes.
- See directions for k.
- m. See directions for k.
- See directions for k.
- Are there more chemicals to report? Please check yes or no. If yes, and you are filling out the form on the web, an additional sheet will appear. If you are filling out the form on paper, please attach a second sheet for those additional chemicals.
- Have additional production units been added to this facility? Please check yes or no. If yes, and you are filling out the form on the web, an additional sheet will appear. If you are filling out the form on paper, please attach a second sheet for those additional production units.

TURA Form S Key

Note: If you are filling out the forms on paper, please fill in the reporting year, facility name, and DEP facility ID number in the top right corner of each page. If you are filling out the forms on the web, these items should be prepopulated. Filling out this information ensures that your submittal stays together.

Note: Dioxin and dioxin-like compounds should be reported in grams. Decimal points may be used in reporting dioxin and dioxin-like compounds.

Note: Please see Appendix B for CAS #s and chemical names.

Section 1: Facility-Wide Use of Listed Chemical

- a. CAS # . Please print or type the CAS # of the chemical that you are reporting.
- b. Chemical Name. Please print or type the name of the chemical that you are reporting.
- c. Manufactured. Please enter the number of pounds of the chemical manufactured at your facility in this reporting year.
- d. Processed. Please enter the number of pounds of the chemical processed at your facility in this reporting year.
- e. Otherwise Used. Please enter the number of pounds of the chemical otherwise used at your facility in this reporting year.
- f. Generated as Byproduct. Please enter the number of pounds of the chemical generated as byproduct at your facility in this reporting year.
- g. Shipped in or as Product. Please enter the number of pounds of the chemical shipped in or as product at your facility in this reporting year.

Section 2: Optional Questions

- a. Chemical was recycled on site. If a materials balance is not apparent, please enter the number of pounds of the chemical was recycled on site.
- b. Chemical was held in inventory. If a materials balance is not apparent, please enter the number of pounds of the chemical was held in inventory.
- c. Chemical was consumed or transformed. If a materials balance is not apparent, please enter the number of pounds of the chemical was consumed or transformed.
- d. Chemical is a compound. If a materials balance is not apparent, please enter the number of pounds of the chemical was a compound.
- e. Other. Please indicate in number of pounds and provide a **brief** explanation.
- f. Non-Routine. Please indicate if anything non-routine occurred at your facility in the past year. If yes, please explain.

Section 3. Chemicals Used in Waste Treatment Units

- a. Is this chemical used to treat waste or control pollution. Please indicate yes or no.
- b. If yes, please check the appropriate box for the amount used.
- c. Optional, you may enter the amount.

Section 4. Toxics Use by Production Unit

- a. Production unit #. Enter the production unit # from the Form S Cover Sheet, Section 4.
- b. Base year. Enter the base year for the production unit.
- c. Quantity of chemical code. Please check the amount using the check boxes.
- d. Byproduct reduction index. Please enter a numeric value.
- e. Emissions reduction index Please enter a numeric value.
- f. Toxics use reduction techniques code. Please see toxics use reduction techniques matrix.

- g. Changes in base year and/or estimating methods for this production unit. Please explain.
- h. Describe anomalies in BRI or ERI. Please explain.
- i-p. See directions for a-h.
- q. Are there more production units? Please check yes or no. If yes, and you are filling out the form on the web, an additional sheet will appear. If you are filling out the form on paper, please attach a second sheet for those additional chemicals.
- r. Are there more chemicals to report? Please check yes or no. If yes, and you are filling out the form on the web, an additional sheet will appear. If you are filling out the form on paper, please attach a second sheet for those additional chemicals.

Toxics Use Fee Worksheet Key

Note: If you are filling out the forms on paper, please fill in the reporting year, facility name, and DEP facility ID number in the top right corner of each page. If you are filling out the forms on the web, these items should be prepopulated. Filling out this information ensures that your submittal stays together.

- a. Facility Name. Please type or print your facility name.
- b. Facility Street Address. Please print or type the street address of your facility.
- c. City. Please print or type the town or city where your facility is located.
- d. State. Pre populated. Facility must be located in Massachusetts
- e. Zip. Please print or type the zip code for where your facility is located.
- f. Base fee. Please enter your base fee from the table above.
- g. # of Form Ss. Please enter the number of Form Ss you are filing.
- h. Multiply line g by \$1,100. Please enter that amount.
- i. Sum of line f and h. Please enter the sum of line f and h.
- j. Fee. Please enter the amount form line i or from the 3rd column of the table (max fee), whichever is less. This is your fee.

Note: If you are filling out these forms on the web, all certification statements, regardless of where they are located in the forms, must be signed at the very end of the submittal.

- k. Authorized Signature. Signature of authorized person at the facility.
- 1. Date. Date of signature.

Toxics Use State Only Form R/A Key

Note 1: If you are filling out the forms on paper, please fill in the reporting year, facility name, and DEP facility ID number in the top right corner of each page. If you are filling out the forms on the web, these items should be prepopulated. Filling out this information ensures that your submittal stays together.

Note 2: Please see Appendix B for CAS #s and chemical names.

Note 3: The sections in the State Only Form R/A correspond to the same sections in EPA's Form R. For more detailed instructions on how to fill out the State Only Form R, please refer to EPA's *Toxic Chemical Release Inventory Reporting Forms and Instructions: Section 313*, available at http://www.epa.gov/tri/report/index.htm.

Section 1: Toxic Chemical Identity

- 1.1 CAS Number. Please print or type the CAS # of the chemical that you are reporting.
- 1.2 Toxic Chemical or Chemical Category Name. Please print or type the name of the chemical that you are reporting. Please note that DEP does not accept the US EPA chemical category identifiers ('N###'); please refer to Appendix B of DEP's Toxics Use Reporting Forms and Instructions for the appropriate Massachusetts reporting number for chemical categories.

Please check the appropriate box to indicate if you are filling out a State Only Form R or a Form A.

State Only Form A

Please check the box to indicate that the chemical you are reporting meets Form A requirements. Please note that a Form A may not be filed for PBT chemicals.

Please enter the production ratio or activity index for this chemical.

Please indicate if there are additional Form A chemicals to report.

Section 4

- 4.1. Please enter the maximum amount of the toxic chemical onsite at any time during the calendar year, using the two-digit code from the TRI instruction package.
- Note 4: Range codes are NOT accepted for any items in Section 5 or 6. Please enter your amounts in pounds, except for dioxin, which should be entered in grams.

Section 5

- 5.1-2 Please check if not applicable.
- 5.1 Fugitive or Non-point Air Emissions. Please enter your fugitive or non-point emissions in pounds here.
- 5.2 Stack or Point emissions. Please enter your stack or point emissions in pounds here.
- 5.3 Discharges to Receiving Streams or Waterbodies. Please check if not applicable. Please enter the total release in pounds.
- 5.4 Underground Injection Onsite to Class I or Class II-V wells. Please check if not applicable.
- 5.4.1 Please enter the total amount injected onsite to Class I wells in pounds.
- 5.4.2 Please enter the total amount injected onsite to Class II-V wells in pounds.
- 5.5 Disposal to Land Onsite. Please check if not applicable.

- 5.5.1A Please enter the total amount disposed to RCRA Subtitle C landfills onsite in pounds.
- 5.5.1B Please enter the total amount disposed to other landfills onsite in pounds.
- 5.5.2 Please enter the total amount disposed for land treatment/application farming onsite in pounds.
- 5.5.3 Please enter the total amount disposed for surface impoundment onsite in pounds.
- 5.5.4 Please enter the total amount disposed for other disposal onsite in pounds.

Section 6

- 6.1A Total Quantity Transferred to POTWs. Please check if not applicable.
- 6.1.A.1 Total Transfers to POTWs. Please enter your total transfers to POTWs in pounds.
- 6.2 Transfers to Other Off-site Locations. Please check here if you did not transfer any wastes to other offsite locations
- 6.2.A Total Transfers. Please enter your total transfers to other off-site locations in pounds.

Section 7A

On-site Waste Treatment Methods and Efficiency. Please check if not applicable.

- 7A.1a. General Waste Stream Code. Please enter your waste stream code. Please see TRI instructions.
- 7A1b.1-8. Waste Treatment method(s) Sequence 3-character codes. Please see TRI instructions.
- 7A.1c. Range of Influent Concentration. Please see TRI instructions.
- 7A.1d Waste Treatment Efficiency Estimate. Please enter the % efficiency of your waste treatment.
- 7A.1e Based on Operating Data. Please check yes or no if the above information is based on operating data.

Do you have additional 7A On-site Waste Treatment Methods and Efficiency information to report? Please check yes or no.

Section 7B

On-Site Energy Recovery Processes. Please check if not applicable.

1-4. Energy Recovery Methods. Please enter your 3-character energy recovery method code here. Please see TRI instructions.

Section 7C

On-Site Recycling Processes. Please check if not applicable.

1-10. Recycling Methods. Please enter 3 –character recycling method code. Please see TRI instructions.

Section 8

- 8.1 Quantity Released. Please enter in prior year (column A), current reporting year (column B), following year, (column C) and second following year (column D) quantity released in pounds.
- 8.2 Quantity Used for Energy Recovery On-site. Please enter in prior year (column A), current reporting year (column B), following year (column C), and second following year (column D) quantity used for energy recovery on-site in pounds.
- 8.3 Quantity Used for Energy Recovery Off-site. Please enter in prior year (column A), current reporting year (column B), following year (column C), and second following year (column D) quantity used for energy recovery off-site in pounds.
- Quantity Recycled On-site. Please enter in prior year (column A), current reporting year (column B), following year (column C), and second following year (column D) quantity recycled on-site in pounds.
- 8.5 Quantity Recycled Off-site. Please enter in prior year (column A), current reporting year (column B), following year (column C), and second following year (column D) quantity recycled off-site in pounds.
- Quantity Treated On-site. Please enter in prior year (column A), current reporting year (column B), following year (column C), and second following year (column D) quantity treated on-site in pounds.
- 8.7 Quantity Treated Off-site. Please enter in prior year (column A), current reporting year (column B), following year (column C), and second following year (column D) quantity treated off-site in pounds.

- 8.8 Quantity Released to the Environment (One-time). Please enter pounds.
- 8.9 Production Ratio or Activity Index. Please enter production ratio or activity index here.
- 8.10 Source Reduction Activities. Did your facility engage in source reduction activities this year? Please check yes or no.
- 8.10.1 Source Reduction Activities. Please enter source reduction code here. Please see TRI instructions.
- 8.10.1a-c. Methods to identify Activity. Please enter method code here. Please see TRI instructions.
- 8.10.2 Source Reduction Activities. Please enter source reduction code here. Please see TRI instructions.
- 8.10.2a-c. Methods to identify Activity. Please enter method code here. Please see TRI instructions.
- 8.10.3 Source Reduction Activities. Please enter source reduction code here. Please see TRI instructions.
- 8.10.3a-c. Methods to identify Activity. Please enter method code here. Please see TRI instructions.

Are there additional State Only Form R chemicals to report? Please check yes or no.

Toxics Use Reduction Techniques Matrix

In this matrix, toxic use reduction techniques mark the rows and production operations head the columns. Within the matrix, a two-digit code appears at the intersection of each row and column.

If a technique as applied to a production operation accounted for an increase of five or more points in the byproduct reduction index between the base year and reporting year, enter the code for that matrix cell in Section 4 of the Form S. Enter all the codes that apply.

You may enter a "miscellaneous" code if two or more techniques (not otherwise entered) together accounted for an increase of five or more points.

	Materials Handling/ Storage	Processing Operations	Finished Goods Handling
INPUT SUBSTITUTION: Changing the raw materials of product to use non- or less toxic materials.	10	11	12
PRODUCT REFORMULATION: Reformulating or redesigning end-products to be non - or less toxic upon use, release, or disposal.	20	21	22
PRODUCTION UNIT REDESIGN OR MODIFICATION: Using production units of a different design than those used previously.	30	31	32
PRODUCTION UNIT MODERNIZATION: Upgrading or replacing production unit equipment or methods.	40	41	42
IMPROVED OPERATION & MAINTENANCE OF PRODUCTION UNIT EQUIPMENT and METHODS: Modifying existing equipment/methods by such steps as improved housekeeping, system adjustments or process/product inspections.	50	51	52
RECYCLING, REUSE, OR EXTENDED USE OF TOXICS: Using equipment/methods that are integral to the production unit.	60	61	62
MANAGEMENT TECHNIQUE OF USING BYPRODUCT AS PRODUCT: Use of byproduct without further treatment when the byproduct would have otherwise been released, treated, or shipped off-site for recycling/reuse.	70	71	72
MISCELLANEOUS	80	81	82

Commonwealth of Massachusetts Request for Verification of Taxation Reporting Information
(Massachusetts Substitute W-9 Format) FOR DEP Toxics Use Fee Billing
Pursuant to IRS regulations, vendors and customers must furnish their Taxpayer Identification Number (TIN) to the Commonwealth.

Please complete this form only if that EIN# has changed and mail to DEP-TURA, 1 Winter Street, Boston MA 02108.

Name (List legal name, if joint names, I See instruction *1 if your name has be	ist first & circle the name of the person or entity whose TIN you enter in en changed).	Part 1 below	. D/B/A OR DIVISION NAME AS	WELL
Legal Address - Number & Street, (incl	ude suite or apartment number when possible) City, State and ZIP (inclu	de 9 digit Zip	when available) SITE ADDRESS	
IF REMITTANCE (PAYMENT) AD	DRESS IS DIFFERENT FROM YOUR LEGAL ADDRESS, PLEAS	SE FILL IN B	OXES PROVIDED BELOW.	
Remittance Address (number & street, i	include suite or apt.# when possible). BILLING ADDRESS	Ch	ack if you arganization recognized by	, the IDC or
Remittance City, State, ZIP(include 9 d	igit ZIP when available).	Ta If o	neck if you organization recognized by x Exempt (i.e., 501(c))? claiming Tax Exempt Status, attach the ling or Determination Letter or this su	e IRS
Phone #			t be recognized by the Commonwealth assachusetts.	of
PART I - TIN VERIFICATION				
Enter your taxpayer identification r in the appropriate box. For individ proprietors, this is your social secur For other entities, it is your federal identification number (FEI).	uals or sole DEP Facility ID Number. rity number.		A Request for Verification of Verification Reporting Information previously filed with the Communder this TIN. This report repl form.	has been onwealth
If vendor has more than 1 name, us for guidelines on whose TIN to ente			Please attach supporting docum specified in instructions on back form under Updates.	
PART II - ORGANIZATION TYP			form under Opidies.	
Enter your organization type. Obta Organization Type Letter from Cha	art B.			
	A -What Name & Number to Give the Requester	CI	HART B - ORGANIZATION TY	PE
For this type of Account:	Give the name and SOCIAL SECURITY number of:		For this type of vendor:	Type
1. Individual	The individual		Individual	I
Sole Proprietorship	The owner (Show individual's name)		Sole Proprietorship	I
For this type of Account:	Give the name and EMPLOYER IDENTIFICATION number of		Partnership	P
3. A valid trust, estate, or pension trust	Legal entity (do not furnish the identification number of the personal representative or trustee unless the legal entity itself is not designated account title)		Trust	Т
4. Corporation	The corporation		Corporation(including Mexico & Canada)	С
 Association, club, religious, charitable, or other tax-exempt organization. 	The organization		Other Please explain on line provided below	О
6. Partnership	The partnership		Please Type or Print	
7. Broker or registered nominee	The broker or nominee		Additional Instructions are proof on the back of the form	
If you selected an organizational type o	of "O" (Other), please explain why?			
For Commonwealth vendors only: I	have read and understand the Commonwealth's Tax Reporting I	nformation (Please Check box).	$\neg \neg$
•	re that I have examined this request and to the best of my kn	`		upplied
Signature		Data	lab of Managharati	
PLEASE PRINT OR	TYPE YOUR NAME & TITLE		lth of Massachusetts Verification of Taxation Reporting I	nformation

GENERAL INSTRUCTIONS

(Section references are to the Internal Revenue Code.)

Purpose of Form. A person who is required to file an information return with the IRS must obtain a correct taxpayer identification number (TIN) to report payments made to the person for the sales of goods and services and real estate transactions. Use the Request for Verification of Taxation Reporting Information (Massachusetts Substitute W-9 Format) to furnish your correct TIN to the Commonwealth and, when applicable, to certify that the TIN you are furnishing is correct (or that you are waiting for a number to be issued).

How To Obtain a TIN. If you do not have a TIN, apply for one immediately. To apply, get Form SS-5, Application for a Social Security Number Card (for individuals), from your local office of the Social Security Administration, or Form SS-4, Application for Employer Identification Number (for businesses and all other entities), from your local Internal Revenue Service office.

If you do not have a TIN, complete the Request for Verification of Taxation Reporting Information, write "Applied For" in the space for the TIN in Part 1, sign and date the form, and give it to the requester. Generally, you will then have 60 days to obtain a TIN and furnish it to the requester. **Note:** Writing "Applied For" on the form means that you have already applied for a TIN **OR** that you intend to apply for one in the near future.

As soon as you receive your TIN, complete another Request for Verification of Taxation Reporting Information, include your TIN, sign and date the form, and give it to the requester.

Penalties

Failure to Furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil Penalty for False Information With Respect to Withholding. If you make a false statement with no reasonable basis that results in no imposition of backup withholding, you are subject to a penalty of \$500.

Criminal Penalty for Falsifying Information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Specific Instructions

Name. If you are an individual, you must generally provide the name shown on your social security card. However, if you have changed your last name, for instance, due to marriage, without informing the Social Security Administration of the name change, please enter your first name and both the last name shown on your social security card and your new last name.

Foreign Vendors. If you are a nonresident alien or foreign entity not subject to backup withholding, give the requester a completed Request for Certificate of Foreign Status (Massachusetts Substitute W-8).

TIN "Applied For". Follow the instructions under *How to Obtain a TIN*, sign and date this form.

Signature. The form must be signed to be considered valid.

Privacy Act Notice. Section 6109 requires you to furnish your correct taxpayer identification number (TIN) to persons who must file information returns with the IRS to report interest, dividends, and certain other income paid, and the acquisition of property. The IRS uses the numbers for identification purposes and to help verify the accuracy of your tax return.

Organizations Recognized by the Commonwealth as Tax Exempt. Organizations seeking recognition of tax exempt status with the Commonwealth must provide documentation of the organization's federal tax exempt status in the form of a ruling or determination letter issued by the Internal Revenue Service (IRS). The Commonwealth recognizes the following IRS tax exempt status organization rulings:

- . Section 501(c) (1 through 23)
- . Section 501 (d)
- . Section 501(e)
- . Section 501 (f)
- . Section 501(k)
- . Section 521 (a)

For more information on Tax-Exempt status, please see IRS Publication 557 (rev. Jan. 95).

Updates to the Request for Verification of Vendor/Customer Taxation Reporting Information. If any of the information requested on this form *changes (i.e., name or address changes)*, the payee must submit a new Request for Verification of Taxation Reporting Information with the updated information. Changes to name or TIN must be accompanied by IRS certification of Name and TIN.

If the payee receives notification from the IRS that an information return (i.e., 1099-MISC) was filed on their behalf by the Commonwealth with incorrect spelling of their name and/or incorrect or missing TIN (commonly referred to as a "B-Notice" or IRS Form 8355), the payee must immediately complete a new Request for Verification of Taxation Reporting Information with the corrected information and attach a copy of the IRS Form 8355 to the form.

If the Office of the State Comptroller or a department of the Commonwealth contacts you because the IRS has informed the Commonwealth that a return filed on your behalf has an incorrect spelling of your vendor name and/or incorrect or missing TIN, you must submit a new Request for Verification of Taxation Reporting Information with the corrected information and attach an IRS verification of your TIN and correct (*legal*) name.

GUIDE TO COMPLETING THE TOXICS USE REPORT

INTRODUCTION

The Toxics Use Reduction Act (TURA) requires that large quantity users of toxic materials:

- 1. report annually on their use of toxic materials; and
- 2. engage every other year in a planning process designed to help them uncover opportunities to reduce their use of toxic chemicals and their wastes.

Under TURA, the preferred means of reducing toxic chemical use and toxic wastes is "toxics use reduction" or TUR. TUR can be achieved by a variety of means, including input substitution (or replacing chemicals used in production), redesigning or modernizing production processes, improving storage and handling practices, training employees in more efficient production techniques, and in-process reuse or recycling.

Across Massachusetts, many facilities have found that TUR has helped them improve production efficiency, cut chemical purchase costs, and improve worker health and safety. Along with those benefits, facilities are reducing the risk of chemical releases to the environment in a cost-effective way.

The key to identifying TUR opportunities is having a clear idea of what chemicals are being used, how and why they are being used, and in knowing what wastes are being produced.

This Reporting Package includes instructions for filling out TURA Forms, and includes tips for how to avoid some common mistakes. Those mistakes are highlighted throughout the instructions as well as in **Appendix D**, and examples are provided to help clarify potentially confusing issues.

NEW! EASY ONLINE TURA FILINGS

Toxics use reports can now be filed electronically via the internet. Features which are specific to the eDEP process are indicated in these directions by the flag symbol [3]. For more information about online filing, go to www.mass.gov/dep/bwp/dhm/tura/eDEP.htm.

Many of the fields in the eDEP TURA forms will pre-fill themselves based on previous TURA submissions (if applicable), and on other existing databases.

Note: NEED HELP WITH REPORTING?

For assistance in reporting contact: DEP at 617-292-5982 or the Office of Technical Assistance at 617-626-1060

WHO MUST FILE THE 2003 TOXICS USE REPORT?

A facility is required to file the 2003 Toxics Use Report if it:

a. employed the equivalent of at least 10 full-time employees (FTEs) in 2003 (see Appendix J and EPA's "Toxic Chemical Release Inventory Reporting Forms and Instructions for 2003" for a full definition); AND

- b. conducted <u>any</u> of the business activities described by Standard Industrial Classification (SIC) codes 10 14, 20 39, 40, 44 51, 72, 73, 75 and 76, (see Appendix A for a description of these codes, and Appendix J); AND
- c. was a Large Quantity Toxics User (LQTU): that is, the facility manufactured, processed or otherwise used a TURA-regulated chemical in excess of a reporting threshold in 2003. See below for reporting thresholds (see Appendix J for definitions of manufactured, processed, and otherwise used.)

All three criteria must be met before a facility is required to file under TURA. If one of the above statements is not true, a facility is not required to file under TURA (see p. 5 of these instructions if your facility reported previously but is exempt this year).

WHAT ARE THE CONTENTS OF A TOXICS USE REPORT?

The annual toxics use report contains information about toxics use and waste during the previous calendar year.

A complete toxics use report includes the following:

- ✓ Form S Cover Sheet
- ✓ Form R for each chemical (or Form A, however Form As are not permitted for PBTs)
- ✓ Form S for each chemical
- ✓ Fee worksheet
- ✓ TURA Billing Information Form
- ✓ TURA 2003 Reporting Checklist

TURA reporting supplements federal Form R reporting -- the annual Toxic Release Inventory form submitted to the U.S. Environmental Protection Agency (EPA) under Section 313 of the federal Emergency Planning and Community Right to Know Act (EPCRA).

Many of TURA's reporting definitions and concepts are the same as those of EPCRA. You must obtain the EPA "Toxic Chemical Release Inventory Reporting Forms and Instructions for 2003" to complete a Massachusetts toxics use report. EPA also maintains an EPCRA hotline which can answer questions about EPCRA or supply the Form R. The hotline number is 800-424-9346, or you can visit the EPA web site at www.epa.gov.tri

WHAT TOXIC SUBSTANCES ARE SUBJECT TO TURA REPORTING?

All the substances on the EPCRA Toxics Release Inventory (TRI) list and on the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or "Superfund") reportable quantities list are subject to TURA reporting and planning, except for those chemicals that have been specifically delisted. See Appendix B for the list of chemicals subject to reporting. Appendix B contains rules for reporting chemical categories and specifically listed chemicals vs. chemical categories.

WHAT ARE THE THRESHOLD QUANTITIES FOR REPORTING?

The threshold amounts for a facility to be a Large Quantity Toxics User (LQTU) are:

- A. **25,000** pounds for a toxic substance that was **manufactured** or **processed** during the reporting year; or
- B. 10,000 pounds for a toxic substance that was otherwise used during the reporting year;
 or
- C. For PBT chemicals, 100 lbs, 10 lbs, or 0.1 gram, depending on the specific PBT chemical. Please see the next table for a list of PBT chemicals and their specific reporting thresholds.

PBT Chemical and Chemical Category Reporting Thresholds

Chemical Name or Chemical Category Name	CAS Number or DEP Chemical Category Code	Threshold (pounds, unless otherwise noted)
Aldrin	309-00-2	100
Benzo(g,h,i)perylene	191-24-2	10
Chlordane	57-74-9	10
Dioxin and dioxin-like compounds (manufacturing; and the processing or otherwise use of dioxin and dioxin-like compounds if the dioxin and dioxin-like compounds are present as contaminants in a chemical and if they were created during the manufacturing of that chemical)		0.1 gram
Heptachlor	76-44-8	10
Hexachlorobenzene	118-74-1	10
Isodrin	465-73-6	10
Lead (this lower threshold does not apply to lead when contained in stainless steel, brass or bronze alloy)	7439-92-1	100
Lead compounds		100
Mercury	7439-97-6	10
Mercury Compounds		10
Methoxychlor	72-43-5	100
Octachlorostyrene	29082-74-4	10
Pendimethalin	40487-42-1	100
Pentachlorobenzene	608-93-5	10
Polychlorinated biphenyls (PCBs)	1336-36-3	10
Polycyclic aromatic compounds (PACs)		100
Tetrabromobisphenol A	79-94-7	100
Toxaphene	8001-35-2	10
Trifluralin	1582-09-8	100

Once a facility meets or exceeds any of the threshold amounts in a, b, or c, it must report each listed non-PBT toxic substance that the facility manufactured, processed or otherwise used at an amount equal to or greater than 10,000 lbs, even though the toxic substance did not trigger the 25,000 lbs threshold for manufactured or processed.

As a result, under TURA, manufactured or processed chemicals in the 10,000 - 25,000 lbs. range are reportable once any threshold is exceeded. By contrast, federal EPCRA reporting does not require non-PBT chemicals to be reported that were manufactured or processed in an amount less than 25,000 lbs.

EPA's "Toxic Chemical Release Inventory Reporting Forms and Instructions for 2003" provides in-depth definitions and guidance for determining whether your facility meets any of the federal reporting thresholds. The TURA definitions of "manufacture," "process," or "otherwise use" are the same as those of EPCRA (see Appendix J) as are the rules for determining amounts for comparison to thresholds.

✓ Example

In 2002, a metal plater processed 20,000 lbs. of nickel to make shopping carts. The facility also otherwise used 15,000 lbs. of toluene to clean parts. Both chemicals are on the TURA list.

The plater is a LQTU because it meets the 10,000 lbs. threshold for otherwise use of toluene. Having "tripped" the threshold for that chemical use, it must report on every listed chemical manufactured, processed or otherwise used equal to or greater than 10,000 lbs. Under TURA, the plater must report **both** toluene and nickel. By contrast, under EPCRA, it would report only toluene.

✓ Example

In 2002, a fabric coater otherwise used 12,000 pounds of toluene as a carrier to deliver adhesive compounds. The facility also had a boiler to provide steam and heat to the facility that burned 100,000 gallons of #6 fuel oil during the year. The facility would report the otherwise use of 12,000 pounds of toluene and 2,000 pounds of polycyclic aromatic compounds (PACs) based on 100 pounds of PACs otherwise used per 5,084 gallons of #6 fuel oil burned (see EPA Guidance for Reporting Toxic Chemicals: Polycyclic Aromatic Compounds Category).

√ Example

In 2002, a circuit-board manufacturer used 520 pounds of lead to solder circuit boards, used 12,000 pounds of sodium hydroxide in waste water treatment, and manufactured 12,000 pounds of copper wire. In addition, the facility had a boiler to provide heat to the plant. The facility burned 1,200,000 gallons of #2 fuel oil during the calendar year.

The facility would report the processing of 520 pounds of lead, the otherwise use of 12,000 pounds of sodium hydroxide, the processing of 12,000 pounds of copper using a federal Form R only (TURA Form S would not be required since pure copper was delisted from TURA in 1999), and the otherwise use of 100 pounds of PACs from the burning of the #2 fuel oil (see EPA Guidance for Reporting Toxic Chemicals: Polycyclic Aromatic Compounds Category).

WHAT ARE THE EXEMPTIONS TO TURA REPORTING?

Some of the exemptions to TURA reporting are the same as those under EPCRA. These include exemptions for certain chemical uses, the de minimis exemption (the de minimis exemption does not apply to PBTs) and the article exemption. These exemptions are summarized below. (Please refer to EPA's TRI Forms and Instructions for more detail on when an exemption applies.)

1. Exempt Uses

A listed chemical is exempt when it is **otherwise used** in:

- ☐ Janitorial or grounds maintenance
- ☐ Maintenance of motor vehicles operated by a facility
- □ Structural components of a facility
- □ Personal items (office supplies, food, drugs, cosmetics, etc.)
- ☐ Intake air or water

The facility maintenance and structural components exemptions DO NOT apply to chemicals used in association with process equipment.

2. De Minimis Exemption

The Deminimis exemption allows facilities to disregard certain minimal concentrations of a listed chemical found in mixtures or trade name products. Under EPA's rules, the chemical must be processed or otherwise used. The de minimis quantity levels are:

- \Box < 0.1% by weight for OSHA carcinogens
- \Box < 1% by weight for other chemicals

The exemption DOES NOT apply to chemicals that are manufactured, intentionally or coincidentally, by the facility. The de minimis exemption DOES NOT apply to PBTs.

3. Article Exemption

Listed chemicals in an "article" are exempt if the item meets certain criteria. The article must be a manufactured item which:

- is formed to a specific shape or design during manufacture;
- ☐ has end use functions dependent in whole or in part on its shape or design; and
- does not release a listed chemical under normal processing or otherwise use.

The exemption only applies to articles that are processed or otherwise used. For example, a firm that buys and attaches metal arms to chairs could be eligible for the exemption. The firm that manufactured the arms generally would not be eligible. Also, to qualify for the exemption, the article must retain its initial thickness or diameter.

WHAT ARE THE PROVISIONS OF DEP'S "EXPANDED ARTICLE" EXEMPTION?

For some companies reporting metals, the requirement that the article retain its initial thickness or diameter has been a bar to claiming the article exemption in the past.

As of reporting year 1995, DEP adopted a policy that broadened the article exemption <u>for state reporting purposes</u>. The "expanded article" exemption was primarily designed to give some reporting and planning relief to firms that changed the shape of an article. Firms that draw wire are a key example.

The "expanded article" exemption applies to copper and its alloys and steels including stainless steels. It does not apply to lead and the lead in alloys. In the intervening years, however, the TURA Administrative Council took steps to delist many of the metals, which might otherwise be covered by the DEP policy.

The "expanded article" exemption policy is still in effect, but the number of firms needing to use it to obtain reduced reporting for certain metals is expected to be limited. To qualify for reduced reporting, the metal must:

	be processed	l only ((not manuf	actured of	or otherwise	e used), and
--	--------------	----------	------------	------------	--------------	--------------

□ remain solid and be only physically reshaped (i.e., drawn, stamped, pressed).

The facility must have a "comprehensive and aggressive" recycling program (as defined by EPA) and the only EPCRA reportable transfers or releases must be to a recycler or scrap dealer.

If the conditions of the exemption are met, a toxics use report for the metal is limited to:

- □ Form S Cover Sheet
- □ Form R
- Section 1 of the Form S (with additional information on the quantity shipped to recycling)
- "Recycling Activity Report Form" for the first year in which the exemption is claimed

Toxics use fee is not applicable in this case.

A copy of the recycling activity report form additional information may be obtained on DEP's web site at www.mass.gov/dep/bwp/dhm/tura/. See Appendix F for more information on the delisted chemicals and the relationship between the delistings, the standard article exemption and the "expanded article" exemption.

WHAT IF WE REPORTED LAST YEAR BUT ARE EXEMPT THIS YEAR?

If your facility does not have to report this year but reported in a previous year, DEP recommends that you notify DEP in writing and explain why. This will help DEP distinguish facilities that are exempt from those that are out of compliance.

Note: The toxics use report Form S Cover Sheet has an optional section (Section 3) that you may complete if your facility is newly exempt from reporting (see p. 11 of this guidance). You may also send a letter to DEP explaining why your facility is newly exempt.

WHEN ARE THE TOXICS USE REPORTS DUE?

The toxics use reports (containing information for calendar year 2003) are due (filed online or postmarked) by July 1, 2004. Note that DEP will assess late fees for late toxics use reports and/or late payment of fees.

Note: Please do NOT send toxics use reports to DEP's regional offices.

WHEN IS THE TOXICS USE FEE DUE?

The signed fee worksheet must be included with your toxics use report due by July 1, 2004. **The fee payment should NOT be sent with the toxics use report.** DEP will issue a bill for the fee amount owed which will be payable within 30 days of receipt. TURA requires on-time payment of fees. Section 19, subpart F of the TURA statute requires DEP to assess a late fee for failure to pay any fee based on the following schedule:

- ☐ Seven to forty-five days late: 20% increase over fee due
- □ Forty-six to ninety days late: 50% increase over fee due □ Over ninety days late: 100% increase over fee due.

DEP will pursue compliance under its statutory responsibility for reporting fee violations. Late payment of the fee will result in the assessment of late fees according to the schedule described above and may result in the interception of state payments, or the assigning of the receivable to a debt collection agency.

WHAT IF I HAVE A FINANCIAL HARDSHIP?

In cases of severe financial hardship, a toxics user who employs less than 100 full-time employees may apply to the Secretary of the Executive Office of Environmental Affairs for a waiver of the toxics use fee for the year.

The Secretary may waive the fee, in whole or in part, or may extend the time for payment or partial payment.

A toxics user who employs more than 100 full-time employees may apply to the Secretary for a payment plan.

Applications for fee waivers or payment plans are due July 1, 2004.

To request an application for a fee waiver or payment plan write to:

Secretary Ellen Roy Hertzfelder Attn: David Lutes Executive Office of Environmental Affairs 251 Causeway Street, Suite 900 Boston, MA 02114

WHEN SHOULD I FILE FEDERAL FORM Rs WITH DEP TO COMPLY WITH EPCRA?

EPCRA requires that facilities file Form Rs with the state as well as with EPA. This requirement is met by filing the complete toxics use report to DEP, which includes a Form R for each reported chemical. Additional copies of the Form R need not be sent to DEP.

Per FEDERAL FORM Rs may be submitted as an attachment with the eDEP toxics use report submittal, or may be sent via mail on diskette or paper copy. For more detailed instructions on how to fill out the Form R, please refer to EPA's *Toxic Chemical Release Inventory Reporting Forms and Instructions: Section 313*, available at http://www.epa.gov/tri/report/index.htm.

WHEN SHOULD I FILE A STATE ONLY FORM R?

TURA regulates more chemicals than EPCRA and a broader range of business activities (i.e., SIC codes). As a result, some facilities may have to file **State Only Form Rs** that are only required under TURA and not under federal law. State Only Form Rs should be submitted **only** to DEP as part of the toxics use report. They should **NOT** be sent to EPA.

Please file a State Only Form R if your facility:

- ☐ Is in SIC codes 10-14, 40, 44-51, 72, 73, 75 or 76, and/or
- ☐ Is filing toxics use reports for chemicals that are **only** on the CERCLA list or only on the TURA list, **and/or**
- □ Is filing for chemicals that were manufactured or processed in an amount below the federal EPCRA threshold of 25,000 pounds, but equal to or greater than 10,000 pounds.

You may file a State Only Form R using the Form A (Alternate Threshold) provided that you do not exceed 500 pounds for the total annual reportable amount for a given chemical, and the amounts manufactured, processed or otherwise used does not exceed one million pounds.

Note: Do not send the State Only Form Rs to EPA. State Only Form Rs may be submitted via the eDEP process, or via paper copy by mail. For more detailed instructions on how to fill out the State Only Form R, please refer to EPA's *Toxic Chemical Release Inventory Reporting Forms and Instructions: Section 313*, available at http://www.epa.gov/tri/report/index.htm.

WHAT IS REQUIRED FOR FILING A FEDERAL FORM A OR STATE ONLY FORM A?

EPA allows a simplified form of reporting based on an alternate threshold for facilities with low amounts of a listed toxic chemical in waste. If your facility qualifies for the simplified reporting, you may submit a Form A in lieu of a Form R (see EPA's "Toxic Chemical Release Inventory Reporting Forms and Instructions" for guidance on eligibility for Form A reporting). Please note that Form As are not permitted for PBT chemicals.

DEP does accept the Form A in toxics use reports. However, there is a data element that appears on the Form R but not on the Form A which is useful to DEP. That element is the production ratio (Form R, section 8.9) and is used by the agency to calculate state wide TUR progress.

Therefore, facilities submitting a Form A (paper copy) should enter a production ratio in section 1.1 of the Form A to the right of the CAS number for the chemical.

Probabilities submitting a federal Form A via eDEP should email walter.hope@state.ma.us with the production ratios for the Form As listed with the chemicals that are applicable.

Provided on the State Only Form A should fill in the production ratio in the space provided on the State Only Form R/Form A.

WHERE ARE TOXICS USE REPORTS FILED?

If filing paper copies of reporting or planning forms, send your toxics use report and plan summaries postmarked by July 1, 2004 to:

Department of Environmental Protection TURA, 8th Floor One Winter Street Boston, MA 02108-4747

WHERE CAN ADDITIONAL REPORTING FORMS AND INSTRUCTIONS BE OBTAINED?

The Toxics Use reporting forms and instructions are available on DEP's web site at www.mass.gov/dep/bwp/dhm/tura. If you do not have access to the internet, please call 617-556-1011 to request a paper copy. EPA maintains an EPCRA hotline which can answer questions about EPCRA or supply the Form R. The hotline number is 800-535-0202 or you can visit the EPA web site at www.epa.gov/tri.

HOW CAN I CORRECT A PREVIOUSLY FILED REPORT?

If you would like to correct an error in a previously filed report, the following steps should be taken:

- 1. Photocopy the page which contains the information to be corrected;
- 2. Clearly identify at the top of the page the year of the report that you are correcting;
- 3. Write the corrected information next to the erroneous data element;
- 4. Clearly identify the new information by circling it in red ink; and
- 5. Have the facility official who certified the report initial and date the change at the top of the page.

If the person who originally certified the report has left the facility or is unavailable, have the senior management official who currently signs toxics use reports initial and date the change.

Note: If you decide to make a change in your unit of product or if you redefine your production units, you may need to revise your BRI and ERI calculations. Please see Appendix C for further instructions.

Note: Send corrections to the Department of Environmental Protection - TURA, 8th Floor, One Winter Street, Boston, Massachusetts 02108-4747.

✓ Example: how to correct a previously filed report **Section 1: Facility-Wide Use of Listed Chemical** WDH 4/1/2004 1026 Lead Compounds a. CAS# b. Chemical Name (Dioxin will be assumed to be grams, decimal points may be used) Facility-wide use of chemical identified in a. Enter the total amount (in POUNDS, except for dioxin) for each applicable category. NOTE: 'Generated as byproduct' (item f.) generally means all waste containing the listed chemical before the waste is treated or recycled. Please refer to the reporting instructions before completing this section. 100,000 66,650 c. Manufactured d. Processed 650 f. Generated as Byproduct e. Otherwise used 66,000

g. Shipped in or as product

CHAPTER 2: DETAILED FORM S COVER SHEET INSTRUCTIONS

The Form S Cover Sheet is divided into four sections.

In Section 1, facilities provide general information and state whether any Trade Secret claims are being made.

In Section 2, a senior management official certifies that the information contained in the toxics use report is true, accurate, and complete.

In Section 3, facilities may elect to provide information about any chemical reported last year that is not being reported this year, including the reasons why.

In Section 4, facilities provide a facility-wide listing of production units and production process codes.

Reporting Guidance

If you are a first time filer, you will need to understand a few key terms in order to file your Toxics Use Report. You will need to define your production units and develop a measure called the "unit of product" to evaluate changes in byproduct. To help you do so, please see Appendix I - Guidelines for Classifying Production Units.

COMPLETING SECTION 1 OF THE COVER SHEET

Note: If filling out forms manually, please fill in the reporting year, facility name, and DEP facility ID number in the top right corner of each page. If you are filling out the forms on the web, these items will pre-populate. Filling out this information ensures that your submittal stays together.

√ Example					
Section 1: General Information					
Facility Name and Address:					
Jane Smith					
a. Name					
211 Main Street					
b. Street Address					
Anytown	MA	02100			
c. City	d. State	e. Zip Code			
Are you making a trade secret claim for any information submitted in this COVER SHEET and/or Form S(s)? Yes \square No \boxtimes					
g. If YES, attach a statement substantia claim. This copy is:	ting the Sanitized	Unsanitized ⊠			
h. Are all chemicals only used to treat vino production units associated with this t		\boxtimes (if yes, then there are			

Explanation of Items a-e.

<u>Facility Name and Address:</u> Write in the facility name and address. Also, when you write your facility name, put the facility name first, then any division, if applicable. For example: "ACME Electronics, Aerospace Division". Do not leave this section blank.

Explanation of Item f.

<u>Trade Secret Claim</u>: You may **not** withhold information from DEP because it is confidential. You may, however, request that the agency keep the information Trade Secret. DEP must determine whether or not a claim of Trade Secret meets the standards for Trade Secret protection.

You should carefully read the Trade Secret regulations (310 CMR 3.00) before you make a claim. There are penalties for frivolous claims.

If you are claiming a Trade Secret, please call DEP at (617) 556-1011 to receive a special reporting package.

Explanation of Items g-h.

<u>Sanitized or Unsanitized:</u> Please refer to the Glossary (Appendix J) for the definition of sanitized vs. unsanitized Trade Secret claims.

<u>Waste Treatment Chemicals</u>: You do not need to assign a production unit number for waste treatment chemicals.

COMPLETING SECTION 2 OF THE COVER SHEET

If you are filling out these forms on the web, all certification statements, regardless of where they are located in the forms, must be signed at the very end of the submittal.

✓ Example

This CERTIFICATION STATEMENT should be signed after all of the pages of the Form S Cover Sheet have been completed.

I hereby certify that I have reviewed this and all attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in these documents are accurate based on measurements and/or reasonable estimates using data available to the preparers of these documents. I am aware that there are significant penalties for willful or intentional submission of false or incomplete information.

John Doe	5/25/2004
a. Authorized Signature	b. Date (mm/dd/yyyy)
John	Doe
c. First Name (print)	d. Last Name (print)
Plant Manger	johndoe@xyz.com
e. Position/Title	f. Email Address

Do not complete Section 2 until all of the required forms are present, complete, and accurate. The certification statement must be signed by a "senior management official," that is, by an official who has management responsibility for the person(s) completing the report, and who has the authority to act as an agent for the facility.

COMPLETING SECTION 3 OF THE COVER SHEET

DEP encourages facilities to complete the optional Section 3 because the information will make it clear that the chemical was not inadvertently omitted. The information on substituted chemicals also will help DEP, OTA and TURI with their industry outreach, technical assistance, and research and development efforts.

_	_			
√	Exa	m	n	
•	LAG	ш	ш	Ιг

OPTIONAL QUESTION. In this section, you may provide information on any chemical reported last year that is not subject to reporting this year. If you substituted a non-listed chemical for a TURA chemical, you may identify the substitution.

The codes to explain why the chemical is not reportable are: [1] Chemical Below Threshold But > 0; [2] No Chemical Use in Reporting Year; [3] Chemical Substitution; [4] Chemical Eliminated (No Substitution); [5] Decline in Business; [6] Other (Explain below in the additional comments section). Check all the codes, up to four, that apply.

a.1	7439965 CAS # of chemical not reportable (if applicable)		langanese Chemical Name	-			
ls	a3. Explanation of why the chemical not reportable (check codes):	□ [2]	□ [3]	 [4]	[5]	[6]	
a.4	CAS # of chemical substituted for TURA chemical	a.5_ I C	Chemical Name)			

Note: From year to year, some facilities may find that they do not have to report a chemical previously reported. In this optional section, a facility may identify such chemical and explain why it is not being reported this year, using the codes provided. Enter as many codes as apply.

If a chemical is not being reported because another chemical was substituted for it, you may identify the substituted chemical. The form allows you to identify two such chemical substitutions. If you have additional substitutions, provide the relevant information on a separate sheet of paper.

De eDEP submittals will allow only valid MA DEP listed chemicals to be reported as 'chemicals not reportable'.

COMPLETING SECTION 4 OF THE COVER SHEET

	_	-	
V	Exar	nple	

Section 4: Facility-Wide Listing of Production Units

A PRODUCTION UNIT is best thought of as the combination of the process (or activities) used to produce a product or service and the product or service. In this section, please identify the PRODUCTION UNITS at the facility, then use the production unit number to report on chemical use in the Form S.

If there has been a substantial change in a PRODUCTION UNIT from the previous reporting year, the PRODUCTION UNIT must be given a new, unique number.

Are all chemicals only used to treat wastewater? Yes \(\subseteq \) No \(\subseteq \) (if yes, then there are no

р	roduction units associate	d with this facility).						
01 a. Production Unit #	b. Describe the Process: Aluminum processing-cleaning, desmutting and etching of aluminum parts							
is this production unit IN USE for the			og or allownia parte					
	c. Describe the Product: Aluminum parts ready for further processing							
	Enter up to 4 four-digit SIC 3471 d. SIC Code	Codes that best describe the e. SIC Code	ne Product from this Produ	oction Unit:				
	h. Check the appropriate description for the unit of product:							
	☐ area ☐ dollar ☐ veight	hours kilowatt len	gth N/A number	☐ volume				

Many of the fields in the eDEP application will pre-fill themselves based on previous TURA Form S submissions (if applicable). Production unit numbers may have been changed by DEP due to the incorrect re-use or changing of Production Unit descriptions in the past. Filers should use the listed Production Unit numbers, or if necessary, create new production units where necessary.

Filers that are reporting only on TURA listed chemicals that are used ONLY for wastewater treatment are not required to describe production unit information (since creating and cleaning wastewater is not a 'product').

Pu SIC Codes may be changed if necessary, and can be found in Appendix A.

The Unit of Product section has been changed, please select the most accurate description or N/A.

Production Process Step Information For This Production Unit

	nter the prod		•					nat involv	e TURA-	renortable	ے	
chemi	cals as an incition proces	nput, o	utput or th	roughput	t. (See the	e report	ing guidan	ce docun	nent for t		9	
1.	BB02 Process Co	de	2.	BB04 Process Code		— 3.	Process Cod	de	- 4. -	Process Co	de	
5.	Process Co	de	6.	Process Code		- 7.	Process Coo	de	- 8	8. Process Code		
9.	Process Co	de		Process Code		— 11.	Process Coo	de	– 12 	Process Code		
13.	Process Co	de	 14.	Process Code		— 15.	Process Coo	de	— 16. –	Process Code		
17.	Process Co	de	 18.	Process Code		- 19.	Process Coo	de	20	Process Code		
At least one process code must be selected for each production unit; process codes are listed in appendix H.												
List the TURA-reportable chemicals associated with this production unit. If a chemical is associated with ALL the process steps entered in i. above, check ALL. If a chemical is associated with some but not all of the process steps, check the numbers that correspond to the process codes entered in i. above (i.e. box 1 below corresponds to the process code entered in i.1).												
j. Produ	ction unit num	ber:	01 Prod. Unit	#	_							
k. TURA Chemical		766939 CAS #			furic aci mical Nan							
Check	Check "All" or the numbers that correspond to the process codes entered in i.											
1.	2.	3.	4.	5.	6.	7.	8. 🗌	9.	10.	11.	12.	
13.	14. 🗌	15. 🗌	16.	17. 🗌	18.	19.	20.	21.	22.	23.	24.	
If you numb report page No Produ produ visitin	are reporters, process ted last year 15 and also in the cition Units action Units. The process we are and furned to the cition units.	ing on descrip . The i in Appendice a first which The G	production tions, productions, production ndix H, shows at time filed a explains uidelines of twww.mas	n units that duct description on Processould be reported by the reported by th	at you repriptions an ess Codes, ported. The Appendiction be contained from the containe	d units describe desc	of product sed in the expect of product sed in the expect of the product sed in the expect of the product of th	y, the proshould be aplanation delines for ding the (617) 556	the same of item i r Classify facility i -1011, or	e as on ing nto by		
	nzo(g,h,i)per								45 17			

It may be difficult to break out chemicals that are being used at very low quantities (i.e., dioxin, mercury as an impurity) into a specific production unit, process or product. Selection of a production unit which is the entire facility is acceptable in these cases.

Under TURA, facilities must identify only those processes and products that involve a listed chemical. In thinking about production processes, facilities typically begin by identifying the basic process, operation or technology used to make the product. In identifying processes, a facility must be sure to account for such intermittent processes such as equipment cleaning, as well as out-of-process activities such as materials storage and handling.

Ultimately, the facility must obtain a complete understanding of its processes or activities that involve reportable chemicals. With the exception of the operations listed below, every operation which uses any amount of chemical for which a report is filed must be included in a production unit. The following operations are NOT considered to be production units:

- pilot plants;
- pilot production units;
- start-up production units for either two years from the date of initial operation or until operational efficiency is achieved, whichever time period is shorter; and
- waste treatment units and pollution control equipment. If you reported a waste treatment unit last year, simply omit it, and its number, from the facility-wide listing of production units. Do not reuse the production unit number.

Please note that the chemicals associated with these operations must be accounted for in the facility-wide totals on the Form S itself.

a: Assign a Production Unit Number.

If this is your first time reporting, assign the number 1 to the first production unit, 2 to the second, etc., and check "Yes" or "No" to indicate if the production unit is new.

In order to track progress in toxics use reduction over time, production units must keep the same number from year to year. If you have reported on the production unit previously, use the same number for each production unit that you used in previous years.

Assign a new production unit number (one you have never used before) if: 1) your facility has begun the production of a new product; or 2) your facility has redefined production units by changing the products and/or production processes included in the production unit.

Description their production units listed sequentially, any new production units will be assigned the next highest sequential number (i.e. previously used highest number was 14, new production unit number will be assigned 15).

ANOI D A COMMON MISTAKE

If you eliminated a production unit, do not re-assign its number to an existing or new production unit.

Amony of the fields in the eDEP Form S will pre-fill themselves based on previous TURA Form S submissions (if applicable). Production unit numbers may have been changed by DEP due to the incorrect re-use or changing of Production Unit descriptions in the past. Filers should use the listed Production Unit numbers, or if necessary, create new production units where necessary.

Complete steps b. through h. if this is your first time reporting on a production unit <u>or</u> the information reported on for the production unit is NOT exactly the same as last year.

b. Describe the Process.

Describe the production process(es) included in the production unit.

c. <u>Describe the Product Produced by the Production Unit.</u>

Describe the product or family of products produced by the processes (see Appendix H for further guidance) entered in b. (If you have filed previously use the description as reported in earlier years.) Then enter all of the applicable 4-digit Standard Industrial Classification (SIC) Codes for the product made. List the SIC code that best represents the product or family of products first, then enter any other codes that apply. Appendix A contains the list of 4-digit SIC codes.

d-g. Enter SIC codes.

Enter up to four SIC codes that best describe the product from the production unit. SIC codes can be found in Appendix A.

h. Describe the Unit of Product Associated with the Production Unit.

A unit of product is a measure of the product outputs or the amount of work produced by a process. If you are a first time filer, please see Appendix I and DEP's "Guidelines for Classifying Production Units". If you filed previously, you already should have chosen a unit of product for the production unit. Please check the unit of product that applies or N/A.

Sometimes, however, it may not be possible to identify a physical measure that reliably reflects outputs. In this case, a non-physical measure may be used as a way to quantify changes in production. Examples of this may include: hours of operation and dollar sales. Non-physical measures can be affected by things that have nothing to do with changing levels of production. For instance, dollar sales will be influenced by changes in inflation, or perhaps, by product pricing.

Note: In most cases, a physical measure will be adequate as a unit of product. Examples of physical measures include number or weight.

i. <u>Indicate Process Codes to Describe Production Units.</u>

The complete list of process codes and appropriate definitions can be found in Appendix H. To fill out Section 4 of the form, place the appropriate codes in the space provided, in the order in which the processing step takes place. In the rare event that the production unit has more than twenty-four individual process codes, note the production unit number on the continuation page and add the additional codes in the space provided.

j. <u>Select a Production Unit.</u>

k-n. Chemical Names and CAS numbers.

List by name and CAS number each chemical used in the production unit in the appropriate space. Check the space marked "ALL" if the chemical is used in all of the processes in the production unit. Otherwise, check the number that corresponds to the process code in which the chemical is used from i. If more than four chemicals are used in the production unit, note the production unit number on the continuation page and add the additional chemicals in the space provided.

CHAPTER 3: DETAILED FORM S INSTRUCTIONS

A Form S must be completed for each reportable chemical. The Form S is divided into four sections which include information about each reportable chemical.

In Section 1, facilities provide information on the amount of chemical that is manufactured, processed or otherwise used at the facility and report the amount produced as byproduct facility-wide, and the amount shipped in or as product.

In Section 2, facilities give an explanation if the chemicals reported are not in materials balance.

In Section 3, facilities indicate whether the chemical is used in waste treatment or for pollution control.

In Section 4, facilities provide information on the chemical at the production unit level. Included are indices describing the year-to-year change in the amount of byproduct and emissions per unit of product.

To complete the Form S, you should first complete a Form R and read EPA's Toxic Chemical Release Inventory Reporting Forms and Instructions. Once you complete the Form R, it will help you in filling out the Form S.

COMPLETING SECTION 1 OF THE FORM S

√ Example	
Section 1: Faci	lity-Wide Use of Listed Chemical
108-88-3 a. CAS #	Toluene b. Chemical Name (Dioxin will be assumed to be grams, decimal points may be used)
Facility-wide use o	f chemical identified in a. Enter the total amount (in POUNDS, except for dioxi

Facility-wide use of chemical identified in a. Enter the total amount (in POUNDS, except for dioxin) for each applicable category. **NOTE:** 'Generated as byproduct' (item f.) generally means all waste containing the listed chemical before the waste is treated or recycled. Please refer to the reporting instructions before completing this section.

	20000
c. Manufactured	d. Processed
	2000
e. Otherwise used	f. Generated as Byproduct
18000	
g. Shipped in or as product	

Explanation of Item a-b.

CAS Number and Name: Enter the **chemical abstract service (CAS) number** for the listed chemical from your Form S cover sheet, Section 4. If the chemical is a chemical category, please refer to the CAS # list in Appendix B.

Enter the chemical name as it appears on the Form S cover sheet, Section 4.

PBT Note: All PBT chemicals can be listed as half pounds except for dioxin and dioxin-like compounds. Dioxin and dioxin-like compounds should be reported in grams. A decimal point should be used to report grams of dioxin and dioxin-like compounds.

Explanation of Items c-g.

<u>Facility-Wide Use of chemical:</u> Enter the total quantity of the toxic chemical that was manufactured, processed, or otherwise used facility-wide during 2002. Also enter the total quantity of the chemical generated as byproduct or shipped in or as product. Please refer to Appendix D-1, Common Reporting Errors, #1.

You should enter the total quantity in pounds (or in grams for dioxin and dioxin-like compounds) for all categories that apply. Include in these totals chemical use in pilot plants, pilot production units, start-up production units and waste treatment units.

De eDEP will only allow the entry of whole pounds, ½ pounds for PBT chemicals, and/or grams for dioxin and dioxin-like compounds.

Reporting Guidance

To complete Section 1, you need to understand the terms, "manufacture," "process," and "otherwise use", "byproduct", and "shipped in or as product".

The terms "manufacture," "process," and "otherwise use" have the same meaning under TURA as in EPCRA. Below are the general definitions of those terms. You should consult EPA's "Toxic Chemical Release Inventory Reporting Forms and Instructions for 2002" for more detailed guidance.

You **manufacture** a listed chemical if you create it (or cause it to come into being) as a product, impurity or waste. Manufacturing also includes importing the chemical into the United States. Chemicals that are "coincidentally" manufactured during production, fuel combustion, or waste treatment, are considered "manufactured" under TURA and are subject to reporting requirements

You **process** a chemical if it is intentionally incorporated into your product. Included are chemicals used as reactants, performance enhancers or components of a product.

You **otherwise use** a chemical if your use does not fit the manufacturing or processing categories. "Otherwise Used" is a default category. Examples include use of cleaners, degreasers and coolants to maintain equipment, and the combustion of chemicals in a boiler (eg., the otherwise use of PACs that are contained in #6 fuel oil that is combusted)

PLEASE NOTE: The Form S has been changed so that the inputs are no longer aligned on the left-hand side of the form, and the outputs are no longer aligned on the right-hand side. Please pay special attention to this when completing the forms.

AVOID A COMMON MISTAKE

The same chemical in the same formulation can be considered processed in some circumstances and otherwise used in others. For example, when a solvent is mixed with other substances to make a coating, the solvent is considered to be processed, since it is being incorporated into a product (the coating). When that coating is applied, however, the solvent is considered to be "otherwise used" since it is merely serving as a carrier that will evaporate off, rather than remain in the product.

Chemicals brought on-site but held in inventory, rather than used in a production process during the reporting year, should not be reported in the facility-wide total use.

Pt eDEP facilities that do not have a mass balance with their chemical use (i.e. manufacture, process or otherwise use do not equal) will be required to respond to at least one of the optional questions in Section 2.

Reporting Guidance

BYPRODUCT

Byproduct is defined as: "all non-product outputs of toxic or hazardous substances generated by a production unit, PRIOR to handling, transfer, treatment or release" (it is equivalent to the sum of Part II, Sections 8.1 - 8.8 of the EPA Form R).

Once a chen	nical is manufactured, processed, or otherwise used, only three things can happen to it:
	It can become a product or a part of one.
	It can be consumed or transformed during the production process

☐ It can end up as a "byproduct."

If a chemical does not become a product and it is not consumed or transformed in the production process, as a general rule it is a "byproduct." Generally, byproduct encompasses all of the "non-products" or wastes that leave the production unit.

However, the following are not byproducts:

- 1. Materials that are reused in a process in their current form without any type of treatment or recovery are not byproducts. They are an input, but their subsequent use is not counted in the amount manufactured, processed, or otherwise used.
- **2.** Any substances that are recycled through a process that is "integral" to the production unit are not byproducts because they never leave the production process (see Appendix G for further guidance on integral recycling).
- **3.** Untreated materials that are shipped off-site for reuse without any type of treatment or recovery are not byproducts, but are products.

Note: When DEP reviews the byproduct numbers, DEP compares the amount reported in the Form S with the amounts reported in Part II, Section 8 of the Form R. In general, the sum of items 8.1 through 8.8 should equal the amount of byproduct reported in the Form S. (The Form S byproduct number may be slightly different due to the way the numbers are rounded off in the Form R.)

Reporting Guidance

BYPRODUCTS VERSUS EMISSIONS

A byproduct is any non-product output of a listed chemical prior to handling, transfer, treatment, or release to the environment. All process outputs from a recycling operation are also counted as byproduct. An emission is any byproduct that leaves the facility boundary directly or after treatment or recycling. In many cases, byproduct will be the same as emissions, but not always.

A BYPRODUCT IS ANY AMOUNT OF A LISTED CHEMICAL THAT LEAVES THE PRODUCTION UNIT AS PART OF:

- ☐ Fugitive Emissions (or evaporative losses)
- □ Wastewaters
- ☐ Spent Materials going to on-site or off-site recycling
- □ Solid Waste
- □ Stack Emissions
- □ Hazardous Waste

EMISSIONS INCLUDE THE AMOUNT OF A LISTED CHEMICAL THAT:

- Goes to the sewer or public wastewater treatment facility.
- □ Leaves the facility as fugitive or stack emissions.
- ☐ Leaves the facility as solid or hazardous waste.
- Leaves the facility to be treated, disposed of, or recycled off-site.

Note: When DEP reviews the Form S, the agency checks to see if the sum of the manufactured, processed, and otherwise used amounts reported in section 1 equal the sum of those amounts reported in the generated as byproduct and shipped in or as product amounts. This is because in many -- but not all -- cases, the two totals should be in balance. The sum of the amount manufactured, processed and otherwise used often equals the sum of byproducts and the amount shipped in or as product. See explanation of Section 2 for a discussion of when the two sides might not be in balance.

Per eDEP facilities that do not have a mass balance with their chemical use (i.e. manufacture, process or otherwise use do not equal) will be required to respond to at least one of the optional questions in Section 2.

COMPLETING SECTION 2 OF THE FORM S

Reporting Guidance

MATERIALS BALANCE

Manufactured + Processed + Otherwise Used = Byproduct + Shipped in Product

You can think of the amount of a chemical that is manufactured, processed or otherwise used as an input. Generally, the byproducts and the amount shipped in product can be viewed as the outputs. Put another way, in general, the amount of the chemical "used" equals the amount contained in the product plus the amount generated as byproduct. This concept of a "materials balance" is incorporated into the design of the Form S.

✓ Example

Section 2: Optional Questions

When the amounts reported in c, d and e in Section 1 are added together, the sum will in many cases equal the sum of f and g. In other words, lines c, d and e will often form a "materials balance." If lines c,d and e are not in approximate balance, you may use this section to explain why. Indicate all the reasons that apply by entering the number of pounds on the appropriate line below (e.g., 4,000 Chemical was held in inventory).

a. Chemical was recycled on site	b. Chemical was consumed or transformed
4000	
c. Chemical was held in inventory	d. Chemical is a compound
e. Other (explain below)	
reported? Yes ⊠ No □	
We had a spill of 1,000 pounds	s of sulfuric acid

Explanation of Section 2.

Optional Question: There are circumstances where the amounts in line c, d, and e of section 1 will not be in balance with lines f and g. Section 2 has several optional questions to allow facilities to explain why this is so. *DEP urges facilities to complete this item because it will clarify what might otherwise be considered a reporting error*. Section 2 lists four of the most common reasons and an "other" category. Indicate all of the reasons that apply by entering the number of pounds on the appropriate line.

Chemical was recycled on-site (in a method that is not integral to the production process): With non-integral recycling, the chemical is counted as a byproduct each time it leaves the production unit for recycling. Facilities report as manufactured, processed, or otherwise used only the amount of the chemical newly added during the year. Consequently, the amount reported as byproduct will often exceed the amount reported as manufactured, processed or otherwise used (See Appendix G for further explanation).

Product was held in inventory: Year-to-year inventory changes can affect the apparent materials balance. The Form S requires that a facility report the amount of a chemical shipped in or as product during the reporting year. Some products manufactured in one year might not be shipped until the next.

Chemical was consumed or transformed: If a chemical is consumed or transformed during production, either partially or totally, the amount generated as byproduct plus the amount shipped in or as product may be less than the amount manufactured, processed or otherwise used.

Chemical is a compound: For metals reported as compounds, the total weight of the compound in the amount manufactured, processed or otherwise used is counted. However, in calculating byproducts, only the weight of the parent metal being reported is counted. Refer to Appendix F for more information on metals reporting and planning.

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Explanation of Item f.

Optional Question: If there was a non-routine occurrence which would affect information in the report, you may choose to report it here. An example of a non-routine occurrence is a major chemical spill that led to an unusual increase in byproducts for the year.

DEP facilities that check 'yes' for this optional question will be required to provide an explanation regarding the non-routine occurrence.

COMPLETING SECTION 3 OF THE FORM S

✓ Example					
Section 3: Chemicals Used in Waste Treatment Units					
a. Is this chemical used to treat waste	or control pollution?	Yes 🛚	No 🗌		
b. If yes, please enter the "quantity of control pollution:			sed to treat waste or c. more than 10,000		
lbs.	☑ b. 3,000 · to 10,0	000 lb3.	c. more than 10,000		
c. Optional – You may 6000 enter the amount:					
Explanation of Item a-c.					

Treat Waste/Pollution Control: Check "yes" or "no" to indicate whether the chemical being reported is used to treat waste or control pollution. If you check "yes," please check the box corresponding to the amount used. It is important to remember that chemicals used in wastewater treatment, or air quality control equipment are not exempt from TUR Planning requirements.

As an option you may also enter the actual amount of the chemical that is used to treat waste or control pollution.

DEP facilities that check 'yes' for this optional question will be required to check an appropriate box (a,b,c) and have the option of providing the number of pounds used to treat the wastewater.

COMPLETING SECTION 4 OF THE FORM S.

	✓ Example
01 a. Production Unit #	Section 4: Toxics Use by Production Unit 1998
	f. Toxics Use Reduction Techniques Code: g. If you are changing the (1) base year, and/or (2) estimating methods (that significantly alter previously reported data) for this PRODUCTION UNIT REPORT, describe the change:
	h. Optional Section: If the BRI or ERI are negative or they do not accurately reflect progress, you may use the space below to describe why:

In Section 4, you provide information on chemical use in a given production unit. You also report your progress in reducing byproducts and emissions (although this would not apply to first-time filers). Enter the production unit number from the Form S Cover Sheet.

Explanation of Item b.

Base Year: Enter the base year for the production unit.

The base year is the benchmark year from which the facility will measure progress in reducing the byproducts and emissions attributable to the production unit. In each succeeding reporting year, the byproducts and emissions attributable to the production unit will be compared to those in the base year, on a per unit of product basis.

₽ eDEP facilities will be required to enter in a base year that is between 1990 and the most recent calendar year.

Reporting Guidance

DEFINITION OF "BASE YEAR"

With some exceptions, the base year is the first year your facility was required to file any information regarding the toxic chemical under EPCRA.

The base year can vary for different production units and chemical combinations.

For most first-time filers, the base year will be 2002 and the byproduct and emissions reduction indices will be 0.

ANOID A COMMON MISTAKE

Facilities sometimes inadvertently enter the reporting year (2003) for the base year. The reporting year of 2003 should ONLY be entered as a base year if the production unit is new or if you are a new filer.

If your base year is 2003, your BRI and ERI will be 0.

Explanation of Item c.

Quantity of Chemical Code: Enter the quantity of chemical code to indicate the amount of the toxic substance that was manufactured, processed, or otherwise used in the production unit during the reporting year. Please refer to Appendix G for guidance on determining the quantity of toxic chemical to report if it was integrally or non-integrally recycle

Explanation of Item d.

Byproduct Reduction Index. Calculate and enter the byproduct reduction index for any production unit that has a base year prior to 2002. Calculate these indices to two significant digits.

BYPRODUCT REDUCTION INDEX

The byproduct reduction index is calculated as follows:

Byproduct Reduction Index = $100 \times \frac{A - B}{A}$

A = <u>Byproduct quantity in the base year</u> # of units of product produced in the base year

B = <u>Byproduct quantity in the reporting year</u> # of units of product produced in the reporting year

Note: First - time filers who use 2003 as a base year should report 0 as the byproduct reduction index.

De eDEP will not allow a BRI of greater than '999'.

De eDEP will not allow a BRI of less than '0' for the most recent calendar year.

✓ Example of Byproduct Reduction Index

A paper manufacturer has sulfuric acid as a byproduct and uses square feet of paper as the unit of product. In 1990, the facility's base year, the facility made 1 million square feet of paper type A and generated 50,000 lbs. of sulfuric acid as byproduct. In 1999, the facility instituted toxics use reduction techniques that reduced the amount of sulfuric acid that became byproduct. That year, the facility made 1.5 million square feet of paper type A and generated 25,000 lbs. of sulfuric acid as byproduct.

BRI =
$$100x$$

$$\frac{\frac{50,000 \text{ lbs.} - 25,000 \text{ lbs.}}{1,000,000 \text{ sq ft}} \frac{50,000 \text{ lbs.}}{1,500,000 \text{ sq ft}}$$
BRI = $100 \times \frac{.05 - .0166}{.05}$
BRI = $100 \times .668$
BRI = $66.8 \text{ rounded up} = 67$

Explanation of Item e.

<u>Emissions Reduction Index</u>. Calculate and enter the emissions reduction index for any production unit that has a base year prior to 2003. Calculate these indices to two significant digits.

EMISSIONS REDUCTION INDEX

The emissions reduction index is calculated as follows:

Emissions Reduction Index =
$$100 \text{ x } \frac{\text{A} - \text{B}}{\text{A}}$$

A = Emissions quantity in the base year

of units of product produced in the base year

B = Emissions quantity in the reporting year # of units of product produced in the reporting year

Note: First - time filers who use 2003 as a base year should report 0 as the byproduct reduction index.

De eDEP will not allow a ERI of greater than '999'.

Dependent of less than '0' for the most recent calendar year.

✓ Example of Emissions Reduction Index

A paper manufacturer has sulfuric acid as a byproduct and uses square feet of paper as the unit of product. In 1990, the facility's base year, the facility made 1 million square feet of paper type A and generated 50,000 lbs. of sulfuric acid as emissions. In 1999, the facility instituted toxics use reduction techniques that reduced the amount of sulfuric acid that became emissions. That year, the facility made 1.5 million square feet of paper type A and generated 25,000 lbs. of sulfuric acid as emissions.

$$BRI = 100 \text{ x}$$

$$\frac{\underbrace{\begin{array}{c} 50,000 \text{ lbs.} \\ 1,000,000 \text{ sq ft} \end{array}}_{1,500,000 \text{ sq ft}} = \underbrace{\begin{array}{c} 25,000 \text{ lbs.} \\ 1,500,000 \text{ sq ft} \end{array}}_{1,500,000 \text{ sq ft}}$$

$$BRI = 100 \text{ x} \underbrace{\begin{array}{c} 50,000 \text{ lbs.} \\ 1,000,000 \text{ sq ft} \end{array}}_{1,000,000 \text{ sq ft}}$$

$$BRI = 100 \text{ x} \underbrace{\begin{array}{c} 0.5 - 0.0166 \\ 0.05 \end{array}}_{0.05}$$

$$BRI = 100 \text{ x} \underbrace{\begin{array}{c} 66.8 \text{ rounded up} = 67 \end{array}}_{0.000,000 \text{ sq ft}}$$

The emissions reduction index is calculated in the same way as the BRI. However, emissions estimates should be collected while completing the Form R. If two or more production units contribute a chemical to a single waste treatment or recycling process, the emissions must be attributed to each of the different production units.

You should discuss how to attribute emissions across all of the production units with a process engineer and/or pollution control engineer.

ANOID A COMMON MISTAKE

When the Byproduct Reduction Index and/or the Emissions Reduction Index reported on the Form S is greater than 100 or significantly less than 0:

If your BRI and/or ERI is greater than 100

- You will need to recheck your calculations for errors. The BRI or ERI cannot be greater than 100, since this value represents the total elimination of the chemical.
- Sections of the report that may need correcting: FORM S: Section 3.4 (Byproduct Reduction Index) and/or Section 3.5 (Emissions Reduction Index)

If your BRI and/or ERI is significantly below 0

- This indicates either a large increase in byproduct generation and/or emissions, or that the calculation of the BRI and ERI is incorrect.
- In the latter case, you will need to check your BRI and ERI calculations (e.g., the unit of product and/or production unit may not be selected properly).

ANOI D A COMMON MISTAKE

The Byproduct Reduction Index and the Emissions Reduction Index should be equal unless:

- You are doing destructive treatment (see Section 7 of the Form R),
- You are recycling on-site,
- Your waste was not shipped off-site.

If any of these apply, your report may correctly indicate that the BRI does not equal the ERI.

If none of these apply you should check sections of the report that may need correcting: Form S: Item d (Byproduct Reduction Index) and/or Item e (Emissions Reduction Index).

Explanation of Item f.

<u>Instructions on entering the Toxics Use Reduction Technique Code</u>: Enter the appropriate toxics use reduction technique code for any production unit that has a base year prior to 2002.

The Toxics Use Reduction Techniques Matrix lists the associated codes for the techniques. Determine which reduction or management technique listed in the vertical axis accounts for any increase in the byproduct reduction index. Then determine where in the production operations the reduction or management technique took place -- in materials handling and storage, processing operations or finished goods handling.

If the byproduct reduction index increased by five or more points **over the index** for the previous year, indicate the appropriate code in the matrix. If two or more reduction techniques together accounted for a five or more point increase, you may enter the appropriate "miscellaneous" code. It will be more useful, however, if you list all of the applicable codes.

Depended by eDEP will not allow entry of these codes if the BRI or ERI is less than '5'.

Optional Section: An optional section is available to allow you to explain any anomalies in your BRI or ERI. For example, if the BRI is negative or you believe it does not accurately reflect TUR progress, you may provide comments in this optional section. The following example illustrates how to use the matrix.

TUR TECHNIQUES MATRIX

√Example

A boat manufacturer implements various toxics use reduction techniques in calendar year 1999. The byproduct reduction index for 2002 is 18, an increase of 12 points over the previous year, 1999, in which the index was 6.

Six points of the increase are due to a change in raw materials in which a non-toxic substance was substituted for a toxic substance. Under the process operations column, 11 is chosen for input substitution.

The other six points resulted from a combination of toxics use reduction techniques: toxics reuse and improved maintenance. Since neither of these changes accounted for 5 points individually, the facility could mark 81 in the process operation column for miscellaneous.

As an alternative, it could mark 61 (toxics reuse) and 51 (improved operations and maintenance).

As a final step in Section 4, report any changes in waste estimation methods or a base year. You may also use this space to explain any unusual circumstances, such as a spill or accident that influenced your BRI or ERI.

Reporting Guidance

WHAT IS "TOXICS USE REDUCTION"?

Toxics Use Reduction is defined in the Toxic Use Reduction Act as:

In-plant changes in production processes or raw materials that reduce, avoid, or eliminate the use of toxic or hazardous substances or generation of hazardous byproducts per unit of product, so as to reduce risks to the health of worker, consumers, or the environment without shifting risks between workers, consumers or parts of the environment. Toxic use reduction shall be achieved through any of the following techniques:

The state of the s
Input Substitution is replacing a toxic or hazardous substance or raw material used in a production unit with a non-toxic or less toxic substance. Examples include: Aqueous cleaning instead of solvent cleaning Soy based inks instead of chemical inks Alkaline plating baths instead of cyanide baths
Product Reformulation is substituting for an existing end-product, an end-product which is non-toxic or less toxic upon use, release or disposal. Examples include: □ Latex based coatings instead of oil based coatings □ Unbleached paper instead of bleached paper
Production Unit Redesign or Modification is developing and using production units of a different design than those currently used. Examples include: ☐ Ozonation instead of chlorine based system for controlling corrosion ☐ Electrostatic powder paint spray instead of solvent based paint
Production Unit Modernization is upgrading or replacing existing production unit equipment and methods with other equipment and methods based on the same production unit. Examples include: ☐ Continuous closed system instead of batch process ☐ Countercurrent and reactive rinsing instead of single tank rinsing in electroplating
Improved Operation and Maintenance of Production Unit Equipment is modifying or adding to existing equipment or methods including, but not limited to, such techniques as improved housekeeping practices, system adjustments, product and process inspections, or production unit control equipment or methods. Examples include: ☐ Installation of Floating Roofs on Chemical Storage Tanks (instead of no roofs) ☐ Strict inventory controls to prevent expiration of chemicals
Recycling, Reuse, or Extended Use of Toxics is using equipment or methods which become an integral part of the production unit of concern, including but not limited to filtration and other closed loop methods. Examples include: Acid regeneration instead of disposal of acid Silver recycling unit instead of discharge of silver in wastewater
WHAT IS NOT "TOXIC USE REDUCTION"?
Toxics use reduction focuses on the production process, rather than the byproduct. In other words, "reduction" is to occur through changes in the production process, rather than through changes in how the waste generated by the production process is handled. Thus, toxics use reduction does not include any practice which promotes or requires, or which is: Shifting the toxic discharge from one medium to another (air to water); Recycling, unless it is integral to the production process; Treatment of toxic waste to make it less toxic or non-toxic; and Incineration.

CHAPTER 4: DETAILED STATE ONLY FORM R/FORM A INSTRUCTIONS

The State-Only Form R/A is to be completed for State only reportable chemicals and State only required Standard Industrial Classification (SIC) Code filers. This form contains a portion of the fields used in the US EPA Form R and Form A. When filling out this form, please refer to instructions in US EPA's Toxic Chemical Release Inventory Reporting Forms and Instructions, available at http://www.epa.gov/tri/report/index.htm. Please note that the State Only Form R and Form A may be filed electronically for the first time this year.

The State-Only Form R/A is divided into the following sections:

In Section 1, facilities provide the chemical name and CAS number of the chemical they are reporting.

The second section is for facilities that are eligible for filling out the State-Only Form A.

In Section 4, facilities enter the maximum amount of chemical onsite at any time during the calendar year.

In Section 5, facilities provide the quantity of toxic chemical entering each environmental media onsite.

In Section 6, facilities provide the quantity of the chemical transferred in wastes to off-site locations.

In Section 7A, facilities enter codes for on-site waste treatment methods and efficiency.

In Section 7B, facilities enter codes for on-site energy recovery processes.

In Section 7C, facilities enter codes for on-site recycling processes.

In Section 8, facilities provide, the quantity of toxic chemical released, used in source reduction and recycling activities, and treated. Facilities also provide their production ratio, and the activity codes for their source reduction activities.

✓ Example

Section 1 Toxic Chemical Identity

1310-73-2	Sodium hydroxide
1.1 CAS Number	1.2 Toxic Chemical or Chemical Category Name

Please note that DEP does not accept the US EPA chemical category identifiers ('N###'); please refer to Appendix B of DEP's Toxics Use Reporting Forms and Instructions for the appropriate Massachusetts reporting number for chemical categories).

Are you filing a Form R \boxtimes yes, continue to Section 4 (note: Sections 2 and 3 are not required for State Only reporting) \square no, fill out only the State Only Form A section below.

Explanation of Section 1.

Pu CAS Number and Name: Enter the **chemical abstract service (CAS) number** for the listed chemical from your Form S cover sheet, Section 4. If the chemical is a chemical category, please refer to the CAS # list in Appendix B. Enter the chemical name as it appears on the Form S cover sheet, Section 4.

Check if you are filling out a Form R or a Form A.

√Example	
State Only Form A	
not exceed 500 pounds this reporting year,	eligibility criteria (i.e., the annual reporting amount did , AND the amount manufactured, processed or bunds). Note: A Form A may not be filed for PBT
Form A Production Ratio or Activity Ind	dex <u>1.2</u>
Are there additional Form A chemicals to repor	rt? yes (paper filers copy this page as necessary) no
Explanation of State Only Form A Section.	
Please check the first box if your chemical mee A.	ets the eligibility requirements for filling out a Form
Please indicate your facility's production ratio	for the reporting year.
Please check if there are additional Form A che	emicals to report.
√Example	
Section 4	
4.1 Two-Digit Code From TRI Instructions	emical onsite at any time during the calendar year
Explanation of Section 3.	
Please enter the code for the maximum amount calendar year.	t of the toxic chemical onsite at any time during the
√Example	
Section 5	
Quantity of the Toxic Chemical Entering Each Enviror	nmental Medium Onsite
5.1-2 Air Emissions	
10 5.1 Fugitive or non-point air emissions (pounds/year)	120 5.2 Stack or point air emissions (pounds/year)
5.3 Discharges to Receiving Streams or Water B	Bodies ⊠ check if not applicable
Total Release (pounds/year)	_

5.4 Underground Injection Onsite to Class I or Class II-V wells ⊠ check if not applicable				
	.1 Underground Injection onsite to Class I	5.4.2 Underground Injection onsite to Class II-V Wells (pounds/year)		
5.5 Disposal to Land Onsite check if not applicable				
5.5	.1A RCRA Subtitle C landfills (pounds/year)	5.5.1B Other landfills (pounds/year)		
(po	.2 Land treatment/application farming unds/year) 000 .4 Other disposal (pounds/year)	5.5.3 Surface Impoundment (pounds/year)		
Explan	nation of Section 5.			
5.1-2 5.1 5.2 5.3	Please check if your facility did not have Please enter your facility's fugitive or not Please enter your facility's stack or point Please check if your facility did not have bodies. If your facility did have any of please enter the total release, in pound	n-point air emissions in pounds/year. air emissions in pounds/year. any discharges to receiving streams or water discharges to receiving streams or water bodies,		
5.4	Please check if your facility did not have any underground injection onsite to class I or class II-V wells. If your facility did have any underground injection onsite to class I or class II-V wells, please enter the total amount, in pounds/year.			
5.5	Please check if your facility did not have	any disposal to land onsite.		
	Please enter your facility's RCRA Subtitl Please enter your facility's other landfill of			
5.5.1 B		t/application farming disposal in pounds/year.		
5.5.3	Please enter your facility's surface impou	undment disposal in pounds/year.		
5.5.4	Please enter your facility's other disposal	ın pounds/year.		
√Ex	ample			
Sect	ion 6			
Transfe	ers of the toxic chemical in wastes to o	ff-site locations		
6.1	I.A Total Quantity Transferred to POTV	Vs ⊠ check if not applicable		
6.1.	.A.1 Total Transfers to POTWs			
6.2	2 Transfers to Other Off-site Locations	check if not applicable		

Explanation of Section 6.

6.2.A Total Transfers (pounds/year)

20000

- 6.1.A Please check if your facility did not have transfers to POTWs to report.
- 6.1.A.1 Please enter your facility's total transfers to POTWs in pounds/year.
- 6.2 Please check if your facility did not have transfers to other off-site locations to report.
- 6.2.A Please enter your facility's total transfers to other off-site locations in pounds/year.

✓ Example
Section 7A
On-site Waste Treatment Methods and Efficiency check if not applicable
1. General WasteWStream Code:7A.1a
Waste Treatment Method(s) Sequence 3-character codes:
P12 B21 7A.1b.2 7A.1b.3 7A.1b.4 7A.1b.5 7A.1b.6 7A.1b.7 7A.1b.8
Range of Influent 1 7A.1c
Concentration: 7A.1c Waste Treatment Efficiency 99 % Estimate: 7A.1d
Based on Operating Data? 7A.1e ⊠ yes □ no
Explanation of Section 7A.
Please check here if your facility did not have any on-site waste treatment to report.
7A.1a Please enter the code for your general waste stream. 7A1b.1-8 Please enter the appropriate waste treatment method sequence 3-character code. 7A.1c Please enter the appropriate range of influent concentration code. 7A.1d Please enter an estimate for the efficiency of your system. 7A.1e Is this information based on operating data? Please check yes or no. Please check no when you have filled out all of your on-site waste treatment methods information to report, and move on to the next section.
✓ Example
Section 7B
On-Site Energy Recovery Processes check if not applicable. Energy Recovery Methods [enter 3-character code(s)]
1 2 3 4
Explanation of Section 7B.
Please check if your facility did not have any on-site energy recovery processes to report.
1-4. Please enter your energy recovery method 3-character code.
√ Example
Section 7C
On-Site Recycling Processes

R11	R22				
1	2	3	4	5	
6	7	8	9	10	

Explanation of Section 7C.

Please check if your facility did not have any on-site recycling processes to report.

1-10. Please enter your recycling method 3-character code.

\checkmark	Example				
Section 8		Column A Prior Year (pounds/year)	Column B Current Reporting Year (pounds/year)	Column C Following Year (pounds/year)	Column D Second Following Year (pounds/year)
Source Reduction and Recycling Activities					
8.1 Quan	tity released				
	tity used for energy very onsite				
	tity used for energy very offsite				
8.4 Quan	tity recycled onsite	2000	2050	3000	3050
8.5 Quan	tity recycled offsite	3000	2050	2000	1500
8.6 Quan	tity treated onsite				
8.7 Quan	tity treated offsite				
	tity released to the environic events, or one-time events				
8.9 Production Ratio or activity index				0.92	
	our facility engage in any elow no	source reduction ac	tivities for this chemica	al during the report	ing year? ⊠ yes,
	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)			
8.10.1	W13	T04	_		
8.10.2		а	b	С	
8.10.3		a	b	С	
0.10.3		 a	b		
Are there	additional State Only F	orm R chemicals	to report? ☐ yes ∑	no	

Explanation of Section 8.

- **8.1-8.8.** Please enter, in pounds per year, the amount of chemical in each source reduction and recycling category, for the prior year and the current year. Please enter an estimate for the amount of chemical in each source reduction and recycling category for the following year and the second following year.
- **8.9** Please enter the production ratio for your facility for the reporting year.

(if yes, continue with additional State Only Form Rs as needed)

- **8.10** Please check if your facility engaged in source reduction activities during the reporting year.
- **8.10.1-3** Please enter your 3-digit source reduction activity code here. For sub-items a, b, and c, please enter the 3-digit code for the method you used to identify these source reduction activities.

Are there any additional state Only Form R chemicals to report? Please check yes or no.